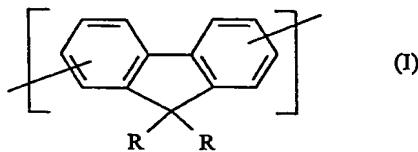


CLAIMS:

1. A cross-linkable compound containing one or more fluorendiyl groups of the formula:



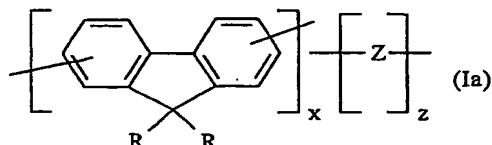
where R, independently each occurrence, is an inert substituent, a monovalent crosslink forming group, X, or a polyvalent crosslink forming group, X', with the proviso that in at least one repeat unit per molecule, at least one R is X or X'.

2. A compound according to claim 1 wherein R in at least one occurrence is a moiety containing a double bond, a triple bond, a precursor capable of in situ formation of a double bond, or a heterocyclic, addition polymerizable group.

3. A compound according to claim 1 wherein R in at least one occurrence is selected from the group consisting of benzocyclobutanyl groups and substituted C₆₋₁₂ arylene groups containing one or more substituents selected from the group consisting of benzocyclobutane, azide, oxirane, di(hydrocarbyl)amino, cyanate ester, hydroxy, glycidyl ether, C₁₋₄ alkylacrylate, C₁₋₄ alkylmethacrylate, alkenyl, alkenyloxy, alkynyl, maleimide, nadimide, tri(C₁₋₄)-alkylsiloxy, tri(C₁₋₄)alkylsilyl, and halogenated derivatives thereof.

4. A compound according to claim 1 wherein R in at least one occurrence is benzo-3,4-cyclobutan-1-yl or p-vinylbenzyl.

5. A cross-linkable composition comprising oligomers or polymers having empirical formula Ia:



where R, independently each occurrence, is an inert substituent, a monovalent crosslink forming group, X, or a polyvalent crosslink forming group, X', with the proviso that in at least one repeat unit per molecule, at least one R is X or X';

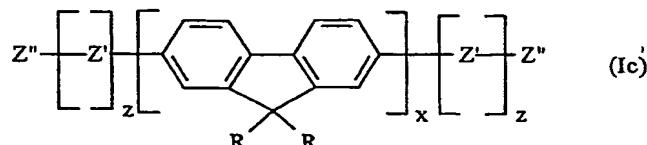
Z is a divalent remnant of a comonomer or a monovalent chain terminating group; and

x is a number from 1 to 10,000 and z is a number from 0 to 10,000 signifying the average number of repeat units in the composition.

6. A composition according to claim 5 wherein Z each occurrence is halo, cyano, triflate, azide, $-B(OR^1)_2$, or $-B\begin{array}{c} O \\ | \\ O-R^2 \end{array}$.

wherein R¹, independently in each occurrence, is hydrogen or a C₁₋₁₀ alkyl group, and R², independently each occurrence, is a C₂₋₁₀ alkylene group.

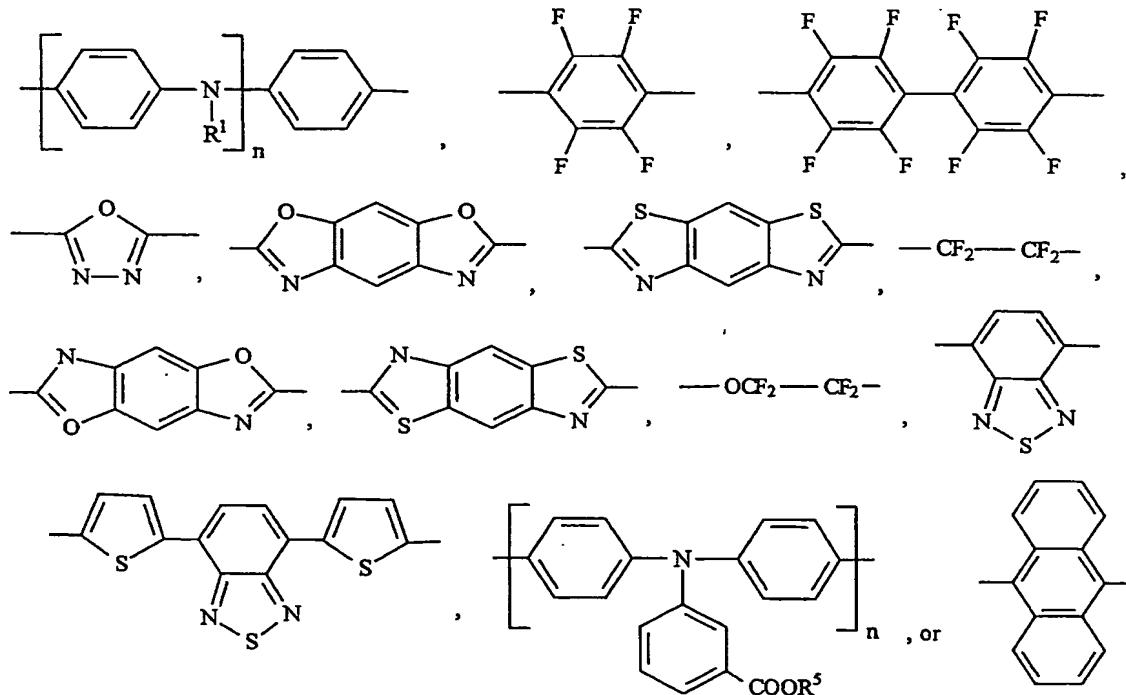
5 7. A crosslinkable oligomer or polymer of the formula:



where R, x and z are as previously defined in claim 1 or 5;

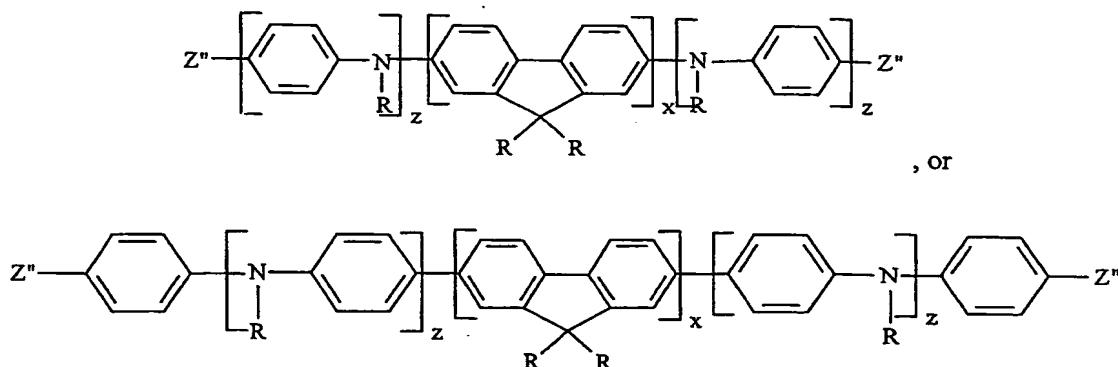
"Z" is a monovalent chain terminating group; and

Z' is independently each occurrence selected from the group consisting of monomers of the formula:



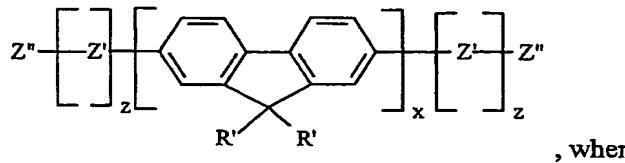
where R¹, independently each occurrence, is an inert substituent, X or X', R⁵ is C₁₋₁₀ alkyl, aryl or aralkyl; and n is 1 or 2.

8. A compound according to claim 7 having the structure:



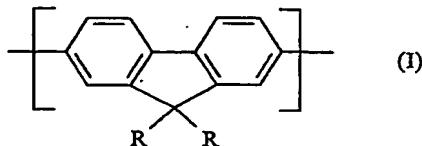
where R, x and z are as previously defined in claim 5 and Z'' is as defined in claim 7.

9. A cross-linked polymer corresponding to formula:



R' independently each occurrence is R or a crosslinked derivative of X or X' with the proviso, that in at least one occurrence, R' is a crosslinked derivative of X or X',
X, X', R, and x are as previously defined in claim 1, and
Z', Z'' and z are as defined in claim 7.

10. A process for preparing oligomers or polymers of claim 7, which process comprises heating one or more compounds containing one or more fluorendiyl groups of the formula:



where R, independently each occurrence, is an inert substituent, a monovalent crosslink forming group, X, or a polyvalent crosslink forming group, X', with the proviso that in at least one repeat unit per molecule, at least one R is X or X' or a composition comprising the same, optionally in the presence of a noninterfering compound, under reaction conditions sufficient to form an oligomer or polymer of Claim 7.

11. A film comprising one or more of the oligomers or polymers according to any one of claims 7 to 9 or preparable according to claim 10.

20 12. An electronic device comprising one or more layers of polymer films, at least one of which comprises a film according to claim 11.